

WHAT IS CLAIMED IS:

1. An exposure method including:
- a first step of forming on a substrate an alignment mark including a concave and convex pattern, said mark being
  - 5 formed by said concave and convex pattern arranged with a pitch which is smaller than the predetermined value between adjacent convex portions having a width of not less than a predetermined value;
  - a second step of forming a coat over said alignment
  - 10 mark and the other area on said substrate;
  - a third step of flattening said coat; and
  - a fourth step of applying a photosensitive material on said coat flattened by said third step and projecting a mask pattern thereto.
- 15 2. An exposure method according to Claim 1, wherein the distance between said adjacent convex portions of said alignment mark having a width of not less than a predetermined value is not less than 2  $\mu\text{m}$ .
3. An exposure method according to Claim 1 or 2, wherein
- 20 the pitch of said concave and convex pattern is not more than resolution of an alignment sensor.
4. An exposure method according to Claim 3, wherein said concave and convex pattern is regular.
5. An exposure method according to Claim 3, wherein said
- 25 concave and convex pattern is irregular.
6. A mask formed with an original pattern of alignment mark together with a pattern to be transferred, wherein the original pattern of said alignment mark is formed by

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disposing, between adjacent blight portions having a width of not less than a predetermined value, one or more blight patterns having a width of less than said predetermined value with a pitch less than said predetermined value.

5 7. A mask according to Claim 6, wherein the maximum value of said pitch is determined so that a concave and convex pattern formed by transferring said blight pattern on said mask onto a substrate is not more than resolution of an alignment sensor.

10 8. A mask according to Claim 7, wherein said blight  
pattern is regularly arranged.

9. A mask according to Claim 7, wherein said blight pattern is irregularly arranged.

10. A mask formed with an original pattern of alignment  
15 mark together with a pattern to be transferred, wherein  
the original pattern of said alignment mark is formed by  
disposing, between adjacent dark portions having a width  
of not less than a predetermined value, one or more dark  
patterns having a width of less than said predetermined  
20 value with a pitch of less than said predetermined value.

11. A mask according to Claim 10, wherein the maximum value of said pitch is determined so that a concave and convex pattern formed by transferring said blight pattern on said mask onto a substrate is not more than resolution of an alignment sensor.

12. A mask according to Claim 7, wherein said blight pattern is regularly arranged.

13. A mask according to Claim 7, wherein said blight pattern is irregularly arranged.

14. An exposure method including steps of:

forming a plurality of first patterns having a height with a predetermined interval on a predetermined surface of a substrate as an alignment mark; and

forming a plurality of second patterns having a height with an interval of less than said predetermined interval between adjacent first patterns.

15. An exposure method according to Claim 14 further including steps of:

forming a film on the substrate on which said alignment mark has been formed, and flattening the surface of the film.

16. An exposure method according to Claim 15 further including steps of:

detecting said alignment mark on the substrate through said film and aligning said substrate; and transferring a circuit pattern onto said substrate.

17. An exposure method according to Claim 14, further including a step of optically detecting said alignment mark by means of a mark detecting system to align the substrate, wherein the distance between each of a plurality of said second pattern is less than resolution of said mark detecting system.

18. A mask including:

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